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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/812,444	03/20/2001	John W. Garrett	2000-0185	9854

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EXAMINER

STRANGE, AARON N

ART UNIT	PAPER NUMBER
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2153

DATE MAILED: 07/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/812,444

Applicant(s)

GARRETT ET AL.

Examiner

Aaron Strange

Art Unit

2153

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 29 January 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 January 2002 is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)             | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 103***

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-3, 5-8, 10 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fijolek et al. (US 6,553,568) in view of Schmuelling et al. (US 6,603,758).
3. With regard to claim 1, Fijolek et al. (Fijolek, hereafter) discloses a method of operating an access network infrastructure comprising the steps of: creating a service policy message (Service Level Agreement) specifying a service class for communications with a network access device (Col 17, Lines 53 to Col 18, Line 14), and transmitting the service policy message to a service policy enforcement point in the access network infrastructure (Bandwidth monitor is notified of addresses and their associated service levels) (Col 17, Lines 64-67). Fijolek fails to disclose that the service policy message is created and transmitted after a network address associated with a service network has been allocated to the network access device and also fails to disclose that the access network infrastructure is connected to a plurality of service networks.

Schmuelling discloses a system where an access network infrastructure is

connected to a plurality of service networks (ISPs) (Fig 1, 116 and 118) in order to allow users access to different ISPs from the same location and teaches that service policies can be assigned to individual users within a larger service class (Col 7, Lines 51-62), such as giving a certain user a higher priority than others in the same class. In order to assign a particular user a service policy, the policy must be generated after an IP address has been assigned to the user. Since the IP addresses are dynamically allocated via DHCP in the system disclosed by Filojek, the user cannot be identified until after the IP is assigned because the IP address is constantly reused for different users over time. The service policy message would have to be generated and transmitted after the IP assignment has taken place to support individual service policies.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to connect the access network infrastructure to multiple service networks such as different ISPs to allow the users to select from a plurality of ISPs when acquiring Internet access. It would have been further obvious to transmit the service policy message after the network address has been allocated in order to allow service policies to be created for individual users within a larger service class.

4. With regard to claim 2, Fijolek further discloses that the service policy enforcement point schedules access to the access network infrastructure based on the service class specified in the service policy message (Higher priority data is transmitted first) (Col 18, Lines 40-45 and Col 28, Lines 42-49).

5. With regard to claim 3, Fijolek further discloses that the service policy enforcement point schedules access using class based queuing (Classes are handled in order of priority and each share a predefined amount of the total bandwidth) (Col 18, Lines 24-57 and Tables 5 and 6).
6. With regard to claim 5, Fijolek further discloses that the access network infrastructure comprises a hybrid fiber coaxial network (Col 1, Lines 20-23).
7. With regard to claim 6, Fijolek further discloses that the service policy enforcement point is a cable modem termination system (Col 17, Lines 17-20).
8. With regard to claim 7, Fijolek further discloses that the service networks utilize the Internet Protocol and wherein the addresses are Internet Protocol addresses ( ).
9. With regard to claim 8, Schmuelling further discloses that the plurality of service networks are operated by different Internet Service Providers (Fig 1, 116 and 118).
10. With regard to claim 10, Fijolek further discloses that the network address is allocated using a host configuration protocol (DHCP) (Col 24, Line 29 to Col 25, Line 35 and Fig 8).
11. With regard to claim 11, Fijolek further discloses that the host configuration protocol is DHCP ((Col 24, Line 29 to Col 25, Line 35 and Fig 8).
12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fijolek et al. (US 6,553,568) in view of Schmuelling et al. (US 6,603,758) in further view of UROn ramp.net.

13. With regard to claim 4, while the system disclosed by Fijolek in view of Schmuelling shows substantial features of the claimed invention (discussed above), it fails to disclose that the service policy enforcement point polices access to the access network infrastructure based on the service class specified in the service policy message.

UROnramp.net discloses offering internet service to users based on a tiered arrangement of plans. More expensive plans get higher bandwidth and larger amounts of allowed monthly utilization. These service plans are analogous to the tiered service plans disclosed by Filojek (Col18, Lines 40-45 and Table 5). Since users are only allowed a limited download amount depending on their service class, it would be advantageous to have the policy enforcement point monitor the usage of the customers and deny access to the users when they have exceeded their allotted bandwidth usage. The users would then be forced to stop accessing the network or pay to have their service restored at the next level, ensuring that the ISP is properly paid for all of the bandwidth that is used.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to have the service policy enforcement point police access to the network infrastructure by blocking access from by users who have exceeded their monthly bandwidth allocation. This would ensure that the ISP is properly paid for all bandwidth that is used by customers.

14. Claim 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over Fijolek et al. (US 6,553,568) in view of Schmuelling et al. (US 6,603,758) in further view of Short et al. (US 6,636,894).

15. With regard to claim 9, while the system disclosed by Fijolek in view of Schmuelling shows substantial features of the claimed invention (discussed above), it fails to disclose that the plurality of service networks offer access to different Internet Protocol-based services.

Short et al. (Short, hereafter) teaches a system where a cable network is connected to a plurality of services and service providers through an access infrastructure (Fig 1). Traffic is appropriately routed to the online service when it is received by the access infrastructure from a client. The client is identified and traffic is routed to the appropriate service if the client is authorized to access it (Col 7, Line 66 to Col 8, Line 18). This is very similar to routing traffic to an appropriate ISP if the client is authorized, and would be an advantageous addition to the system.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use the system disclosed by Fijolek in view Schmuelling to control access to Internet services instead of or in addition to controlling access to ISPs. Both ISPs and Internet services require authentication to ensure access is only given to authorized users, and the modified system would allow an authorized client to automatically identify itself and gain instant access to authorized services.

**Conclusion**

16. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron Strange whose telephone number is 703-305-8878. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached on 703-305-4792. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

AS 6/25/2004

  
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